CLAIM AMENDMENTS

1. (Currently Amended) A distributed network computing environment, comprising:

a plurality of clients communicating within a multicast cloud distributed network using contentspecific <u>date</u> data within messages to implement data routing and message culling in a groupware application; and

one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing, to permit or inhibit the distribution of a particular message based upon the content of the message.

- 2. (Original) The environment of claim 1, wherein the application is a distributed simulation or game.
- 3. (Previously Presented) The environment of claim 1, wherein the application is a client-selectable and controllable data service associated with the distribution of audio, video, or other digital signal streams.
- 4. (Original) The environment of claim 1, wherein the clients enter, leave, and interact with the cloud through a lobby manager.
- 5. (Original) The environment of claim 4, wherein the lobby manager is further operative to validate the application in terms of compatibility and download data to correct for deficiencies.
- 6. (Previously Presented) The environment of claim 4, wherein the lobby manager is further operative to simultaneously support multiple clouds through multicast or replicated unicast protocols.
- 7. (Original) The environment of claim 1, wherein the routing modules implement applicationspecific message culling to reduce client-cloud communications.

- 8. (Original) The environment of claim 7, wherein the message culling includes message omission, rerouting, and other quality-of-service modifications.
- 9. (Original) The environment of claim 7, wherein the application communicates internal state changes into the cloud through an API.
- 10. (Original) The environment of claim 1, wherein the application is a massive groupware application involving thousands of world-wide participants.
 - 11. (Previously Presented) A distributed network computing environment, comprising: a network-enabled client application;

at least one lobby manager that facilitates communications between the client application and a federation; and

one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing, to permit or inhibit the distribution of a particular message based upon the content of the message to reduce the communications with the federation.

- 12. (Original) The environment of claim 11, wherein the application is a distributed simulation.
- 13. (Original) The environment of claim 11, wherein the application is a game.
- 14. (Original) The environment of claim 11, wherein the application is a client selectable and controllable data service.
- 15. (Original) The environment of claim 14, wherein the data service includes audio, video, or other type of digital signal feed.
- 16. (Original) The environment of claim 11, wherein the routing modules further support a point-to-multipoint distributed communications model between clients.

- 17. (Original) The environment of claim 11, wherein: at least some of the client applications run on host platforms; and the routing modules further support conventional internet packet routing among the hosts.
- 18. (Original) The environment of claim 11, wherein the routing modules further support one or more conventional multicast protocols.
- 19. (Original) The environment of claim 11, wherein the application communicates internal state changes into the federation through an API.
- 20. (Original) The environment of claim 11, wherein the message culling includes message omission, rerouting, and other quality-of-service modifications.
- 21. (Original) The environment of claim 11, wherein the lobby manager is further operative to validate the client application compatibility with the federation and download data to correct for deficiencies.
- 22. (Original) The environment of claim 11, wherein the lobby manager is further operative to simultaneous process multiple federations.
- 23. (Original) The environment of claim 22, wherein the federations communicate through multicast or replicated unicast protocols.